

Notice of Allowability	Application No.	Applicant(s)	
	09/683,020	GOEBEL, KAI FRANK	
	Examiner	Art Unit	
	Fred Ferris	2128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 15 August 2005.
2. ☒ The allowed claim(s) is/are 1-3, 5-16, 18-39, 77-79, 81-90, and 92-113. NOW RENUMBERED AS 1-72
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

1. *This Office Action is responsive to applicant's amendment filed 15 August 2005. Applicants have now cancelled claims 4, 17, 40-76, 80 and 91. Amended claims 1-3, 5-16, 18-39, 77-79, 81-90, and 92-113 are currently pending in this application and have now been allowed over the prior art of record.*

Response to Arguments

2. *Applicant's arguments filed 15 August 2005 with respect to amended claims 1-3, 5-16, 18-39, 77-79, 81-90, and 92-113 have been fully considered and are persuasive. The previous 102(a/b) rejections have been withdrawn in view of applicant's amendment to independent claims 1, 14, 26, 33, 38, 77, 89, 100, 107 and 112. The previous 35 USC 101 rejection is no longer applicable in view of applicant's cancellation of claims 40-76.*

EXAMINER'S AMENDMENT

3. *An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.*

The application has been amended as follows:

In line 3 of claim 26 insert a space in the fifth word of the line so the line reads "a design of experiments "component that" establishes..." instead of "componetthat".

Allowable Subject Matter

4. Claims 1-3, 5-16, 18-39, 77-79, 81-90, and 92-113 are allowed over the prior art of record.

The following is an examiner's statement of reasons for allowance:

Applicants are disclosing a system for assessing the performance of an algorithm under development using design of experiments (DOE) techniques including number of experiments, Monte Carlo simulation, and factorial experiments, for establishing an acceptable number of experiments in analyzing improvements to an algorithm during simulation. This has been disclosed in the prior art of record.

While certain elements of the claimed invention are individually disclosed in the prior art, the prior art of record does not disclose the specific arrangement of elements including a DOE component establishing an acceptable number of algorithm experiments, an experiment performance component that runs an established number of algorithm experiments (especially inclusive of a performance metric component that evaluates algorithm experiment results by comparing with an established baseline algorithm (specification: page 6, line 23 to page 7, line 17, page 16, line 1-21) and performance metric (specification: page 9, line 17 to page 18, line 15, Fig. 4)), and a simulation component that simulates algorithm behavior using results from the experiment performance component as now recited in independent claims 1, 14, 26, 33, 77, 89, 100, and 107. The prior art of record further does not disclose the elements recited in independent claims 38, and 112 relating to the Monte Carlo simulation

component computing a z-score based on entries in a confusion matrix (specification: page 17, line 1-21, Tab. 2) and subsequently generating random values that reflect the algorithm behavior in the confusion matrix.

The closest prior art uncovered during examination teaches certain limitations of the claimed invention as follows:

"Design-Ease Software Version 6 User's Guide": Teaches a system for assessing the performance of a developmental algorithm using DOE methods in establishing an acceptable number of experiments for analyzing an algorithm and running established number of experiments and simulating the behavior of the algorithm using experiment performance results. However, Design-Ease does not disclose or render obvious the arrangement of elements including a performance metric component that evaluates algorithm experiment results by comparing with an established baseline algorithm and performance metric as now recited in independent claims 1, 14, 26, 33, 77, 89, 100, and 107, or the Monte Carlo simulation component computing a z-score based on entries in a confusion matrix as further recited in independent claims 38 and 112.

"Conducting Experiments With Experiment Manager", M. Angel: Teaches assessing the performance of a developmental algorithm using DOE methods in establishing an acceptable number of experiments for analyzing an algorithm and running an established number of experiments on an algorithm, but again, does not disclose or render obvious the arrangement of elements including a performance metric component that evaluates algorithm experiment results by comparing with an established baseline algorithm and performance metric as now recited in independent claims 1, 14, 26, 33,

77, 89, 100, and 107, or the Monte Carlo simulation component computing a z-score based on entries in a confusion matrix as further recited in independent claims 38 and 112.

The features noted above relating to the specific arrangement of elements as now recited in the independent claims 1, 14, 26, 33, 38, 77, 89, 100, 107 and 112, renders the claimed invention non-obvious over the prior art of record. Dependent claims 2-3 and 5-13, 15-16 and 18-25, 27-32, 34-37, 39, 78-79 and 81-88, 90 and 92-99, 101-106, 108-111, and 113 are deemed allowable as depending from independent claims 1, 14, 26, 33, 38, 77, 89, 100, 107 and 112 respectively.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

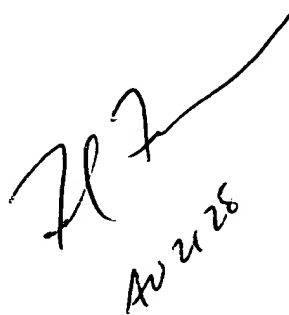
Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred Ferris whose telephone number is 571-272-3778 and whose normal working hours are 8:30am to 5:00pm Monday to Friday. Any inquiry of a general nature relating to the status of this application should be directed to the group receptionist whose telephone number is 571-272-3700. If attempts to reach the

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examiner by telephone are unsuccessful, the examiner's supervisor, Jean Homere can be reached at 571-272-3780. The Official Fax Number is: (703) 872-9306

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October 24, 2005



Handwritten signature of Fred Ferris, dated 10/24/05.